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NOTES ON GEOGRAPHIC DISTRIBUTION

New record of *Heraclides a. astyalus* (Godart) (Lepidoptera: Papilioninae: Papilionini) on the northern São Francisco river, Brazil

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ABSTRACT: A single male of *Heraclides a. astyalus* was collected in the Catimbau National Park, Buíque, Pernambuco, located in the semi-arid region of northeastern Brazil. It is the first record for the species in the Caatinga domain and the first record for the subspecies in latitudes above the São Francisco river.

For the majority of invertebrate groups of the Brazilian semi-arid region, communications of new occurrences are of limited scientific relevance because as a whole, this region is poorly inventoried (see Santos *et al*. 2011, for insects) and therefore almost all registered species would configure a new local occurrence. There are some exceptions to this assertive though, as is the case of papilionid butterflies (Papilionidae). They are large, colorful and relatively easy to sample, which makes them one of the best studied insect groups all over the world (Tyler *et al*. 1994). Not surprisingly, the geographical distribution of almost all known species of papilionid butterflies is well documented in the Americas. Robust occurrence maps covering all Brazilian territory, including the Caatinga, have long been available (see Tyler *et al.* 1994).

Heraclides astyalus is a widespread papilionid, occurring from southern United States to Argentina (DeVries 1987), typically in decidual, open and disturbed forest environments (DeVries 1987; Brown 1992; Tyler *et al*. 1994). Nevertheless, until now it was not recorded in the northeastern area above the São Francisco river, a large segment of the Brazilian territory, between the states of Alagoas and Maranhão (Tyler *et al.* 1994).

Heraclides astyalus astyalus is now recorded at the Catimbau National Park, located in the NE-Brazilian semi-arid. This is the first record for the species in the Caatinga domain and the first record for the subspecies in latitudes above the São Francisco river (Figure 1). An old male (Figure 2) was collected in a ridgetop while visiting flowers of *Lantana* sp. on March 23rd of 2009. The specimen is now deposited in the entomological collection of the Universidade Federal de Pernambuco (CE-UFPE 603L). Its geographical distribution and habitats are very similar to those of *Heraclides anchisiades* (Esper, 1788), *H. thoas* (Linnaeus, 1771) and *Battus polydamas* (Linnaeus, 1758), the other Papilionidae species recorded at the Catimbau National Park (Nobre *et al*. 2008).

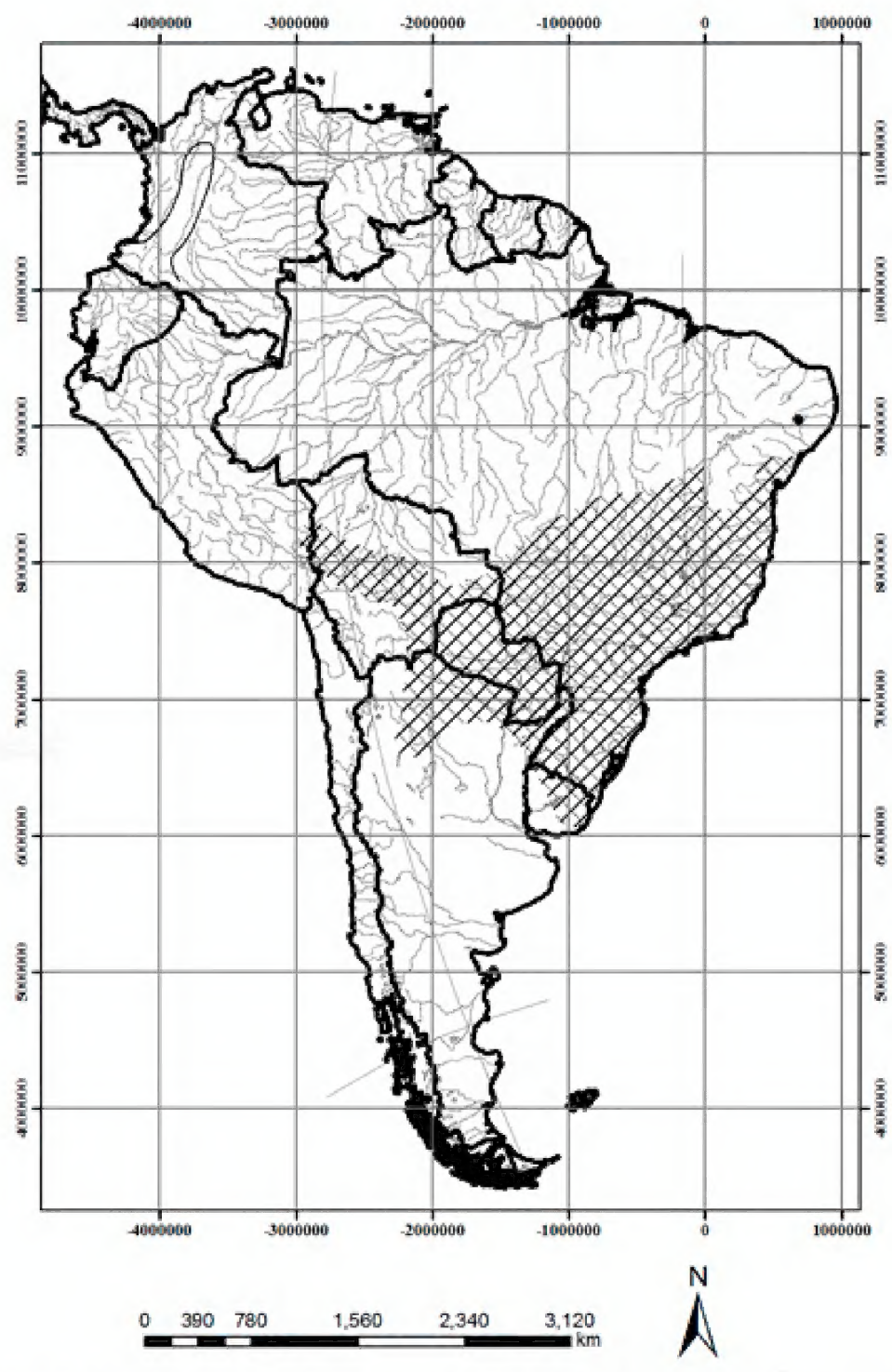

FIGURE 1. Distribution map for *Heraclides a. astyalus* (diagonal lines) and new record, in the Catimbau National Park, Buíque, Pernambuco (black dot). Modified from Tyler et al. (1994).

Figure 2. *Heraclides a. astyalus*, male specimen collected in the Catimbau National Park, Buíque, Pernambuco. Scale bar = 1cm.

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Literature Cited

Brown, K.S. Jr. 1992. Borboletas da Serra do Japi: diversidade, hábitats, recursos alimentares e variação temporal; p. 142-187 *In* L.P.C. Morellato (org.) *História Natural da Serra do Japi – Ecologia e preservação de uma área florestal no Sudeste do Brasil*. Campinas: Editora da Unicamp/FAPESP.

DeVries, P.J. 1987. *The Butterflies of Costa Rica and their Natural History. Volume I: Papilionidae, Pieridae and Nymphalidae.* New Jersey: Princeton University Press. 327 p.

Nobre, C.E.B.; C. Schlindwein and O.H.H. Mielke. 2008. The butterflies (Lepidoptera: Papilionoidea and Hesperioidea) of the Catimbau National Park, Pernambuco, Brazil. *Zootaxa* 1751: 35-45.

Santos, J.C., I.R. Leal, J.S. Almeida-Cortez, G.W. Fernandes and M. Tabarelli. 2011. Caatinga: the scientific negligence experienced by a dry tropical forest. *Tropical Conservation Science* 4(3): 276-286.

Tyler, H., K.S. Brown Jr, and K. Wilson, 1994. *Swallowtail butterflies of the Americas: a study in biological dynamics ecological diversity, biosystematics and conservation.* Ganesvill: Scientific Publishers. 376 p.

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